

Subject: Issues in Provisioning, Maintaining GPs of BharatNet for which this Restructuring Proposal is being designed.

- 1. False projection of One Geography, One Owner:** One of the most fundamental but false features of the proposed organisational restructuring is the concept of **One Geography, One Owner**, under which a single Block In-charge and a GP Cluster In-charge are entrusted with comprehensive responsibility for all commercial, technical, operational and customer service activities within their respective geographical jurisdictions. While the objective of creating clear accountability is laudable, the practical feasibility of assigning such a wide range of responsibilities to a single officer requires careful examination before the model is replicated across BSNL. The success of any organisational restructuring depends not merely on defining accountability but on ensuring that the assigned responsibilities are realistically achievable within the available manpower, infrastructure, resources and geographical conditions. In the case of Uttarakhand, where the terrain is predominantly mountainous and the telecom network extends to some of the most inaccessible locations in the country, this issue assumes even greater significance.
- 2. Geographical Challenges of Uttarakhand:** Unlike many other states where villages are connected through relatively flat terrain and extensive road networks, Uttarakhand presents unique geographical challenges. A single administrative Block often comprises dozens of Gram Panchayats scattered across mountainous regions separated by deep valleys, rivers and forests. Many villages remain several kilometres away from roads to reach, while landslides, snowfall and heavy rainfall frequently disrupt transportation and communication. Consequently, travelling from one end of a Block to another may require several hours even though the geographical distance appears modest on a map. During the monsoon season, road closures and landslides may render certain locations inaccessible for several days. Under such conditions, expecting one officer to provide effective supervision over the entire Block while simultaneously attending to commercial activities, customer grievances and technical maintenance may not be operationally realistic. Unlike urban or plain areas where multiple field visits can be completed within a single working day, a field inspection in many parts of Uttarakhand may consume the entire day due to travel alone. This geographical reality substantially reduces the effective working time available for managerial and administrative functions.
- 3. Backbone Availability is the Key Factor in Keeping GP Sites Operational:** Experience shows that the biggest challenge in maintaining BharatNet services is not merely the GP equipment but ensuring continuous backbone connectivity. Whenever the backbone transmission network fails due to fibre cuts, transmission failures, or equipment faults, multiple Gram Panchayats simultaneously become non-operational. The most critical requirement for keeping Gram Panchayat sites operational is the availability of a reliable and adequately provisioned backbone network. In many locations, the backbone bandwidth available for BharatNet services is either insufficient or highly congested, resulting in poor service quality, frequent outages, and inability to deliver the intended broadband services. Even if the GP equipment is fully functional, services remain disrupted whenever the upstream backbone connectivity fails. Therefore, strengthening and ensuring redundancy of the backbone network is a prerequisite for maintaining uninterrupted GP connectivity. Therefore, improving backbone reliability through adequate

redundancy, faster fault localization, robust transmission planning, and preventive maintenance should receive the highest priority.

- 4. Non-availability of Reliable Power Supply:** Many Gram Panchayat locations suffer from irregular or unreliable commercial power supply. Frequent power failures, prolonged outages, and voltage fluctuations adversely affect the operation of OLTs, ONTs, switches, routers, and other active network equipment. Without uninterrupted power, maintaining high network uptime becomes practically impossible despite the availability of transmission infrastructure.
- 5. Non-functional Solar Power Systems:** Solar power systems are installed at several BharatNet sites to overcome unreliable grid power. However, a large number of these solar installations are presently non-functional due to defective solar panels, damaged batteries, faulty charge controllers, theft, poor maintenance, and ageing equipment. As a result, many GP sites remain without any dependable backup power source, leading to repeated service interruptions during commercial power failures.
- 6. Maintenance Responsibility for Gram Panchayats Handed Over after the Merger:** After the merger, BSNL has become fully responsible for ensuring continuous operation, preventive maintenance, fault restoration, and service availability of all Gram Panchayats handed over from BBNL. This includes maintenance of optical fibre cables, active equipment, power systems, batteries, solar installations, and associated infrastructure. The increased maintenance responsibility requires dedicated manpower, logistics, vehicles, testing equipment, and financial support to meet the expected service levels.
- 7. Scattered and Non-Traceable GP Locations Require Local Maintenance Resources:** The Gram Panchayat sites are widely dispersed across rural India and are often located in villages that are difficult to trace or access. Many sites are far away from BSNL exchanges or maintenance centres. Since faults require immediate attention, there is a critical need for trained local maintenance personnel residing within or near the concerned Gram Panchayat. Dependence on staff travelling from distant locations results in delayed fault restoration, increased operational costs, and poor network availability.
- 8. Need for Dedicated Maintenance Strategy:** Considering the geographical spread, increased infrastructure, and shortage of field manpower, maintenance of the BharatNet network cannot be effectively managed through the existing BSNL maintenance framework alone. A dedicated maintenance strategy is required, including deployment of additional field staff, engagement of local maintenance agencies where necessary, strengthening of transmission backbone, restoration of solar power systems, adequate logistics support, and creation of decentralized maintenance teams at district and block levels to ensure timely fault restoration and improved network uptime.
- 9. Difficulty in Laying OFC and Detecting Cable Faults in Remote Areas:** A significant portion of the BharatNet optical fibre network passes through inaccessible forests, hilly terrains, river crossings, agricultural fields, and other remote locations. Fault detection in these stretches is extremely difficult due to the absence of proper route indicators, cable markers and fault localization mechanisms. Identifying the exact fault location often requires physical patrolling over several kilometres, resulting in prolonged restoration time. In many cases, roads and transport facilities are unavailable, making restoration both time-consuming and expensive.
- 10. Unprecedented Expansion of Responsibilities:** The restructuring proposal assigns to the Block In-charge responsibility for an exceptionally broad spectrum

of activities. These include management of mobile services, FTTH, Enterprise Business, BharatNet infrastructure, transmission, customer service, Government coordination, marketing, revenue generation, preventive maintenance, fault restoration, monitoring of key performance indicators and supervision of field staff. Each of these functions independently constitutes a specialised area requiring dedicated attention. Enterprise Business demands regular interaction with Government departments, banks, educational institutions and corporate customers for acquisition of new business and timely execution of projects. Mobile and FTTH operations require continuous monitoring of network performance, quality of service, customer complaints and infrastructure availability. BharatNet maintenance involves supervision of optical fibre, active equipment, power systems, batteries and connectivity across numerous Gram Panchayats. Bringing all these responsibilities under one officer may enhance accountability in theory, but in practice it significantly increases the workload beyond manageable limits.

11. Acute Shortage of Line Staff for Field Maintenance: The maintenance of BharatNet infrastructure is predominantly a field activity involving cable patrolling, OFC fault localization, splicing, preventive maintenance, power system upkeep, equipment replacement, and restoration work. These activities traditionally fall within the responsibilities of line staff such as Telecom Mechanics, Linemen, and cable maintenance personnel. However, BSNL presently faces an acute shortage of such field manpower, primarily because a large number of experienced line staff opted for Voluntary Retirement Scheme (VRS) during 2019 under the policy assumption that future manpower requirements would reduce. With the subsequent merger of BBNL and transfer of BharatNet maintenance responsibilities, the workload has increased significantly while the available field workforce has drastically declined. This mismatch between workload and manpower has become one of the most serious challenges in ensuring reliable maintenance of the BharatNet network.

12. Shortage of Manpower with desired skills: Main issues in maintaining GPs are non-availability of line staff which left BSNL in VRS 2019, and hence shortage and BSNL management is beating bushes on name of restructuring proposal which will not meet practical requirement for maintaining GPs. The few line staff may be in hundreds available with BSNL, its average age of existing manpower is fifty-Five plus and the work of maintaining GPs needs the young and energetic persons to take care of GPs installed by BBNL and partially operative as of now. Instead of projecting the availability of manpower with false projection, BSNL has to come forward with truth that there is no manpower available with BSNL to maintain the External network and not at all for GPs and OFC Network of BBNL. BSNL has to come up with alternative proposal which will physically and practically support in maintain GPs, OFC Network of BBNL and provision of FTTH connections by generating demand in Rural areas as desired by DoT. There are about 2.5 lakhs GPs and for maintain these many GPs there is need of special action plan and this proposal by BSNL will not meet the desired requirement of newly added BBNL services.

13. Conflict between Commercial and Technical Responsibilities: A fundamental concern with the proposed model is the combination of commercial and technical responsibilities under the same officer. Business development activities require continuous interaction with customers, participation in meetings, preparation of proposals, coordination with Government agencies and marketing initiatives. These activities are generally planned in advance and require sustained engagement with stakeholders. Technical responsibilities, on the other hand, are largely unpredictable. Optical fibre cuts, BTS failures, power interruptions,

transmission outages, battery failures and equipment faults require immediate attention irrespective of ongoing commercial commitments. During natural disasters or adverse weather conditions, fault restoration becomes the highest priority. As a result, the officer is constantly required to choose between urgent technical work and important commercial responsibilities. Inevitably, one function receives priority at the cost of the other, thereby defeating the objective of achieving excellence in both domains.

- 14. Time Management Constraints:** The practical limitation of available working hours presents another major challenge. A typical Block In-charge is expected to review network performance, supervise maintenance activities, monitor FTTH growth, attend meetings with Government officials, resolve customer grievances, review BharatNet operations, conduct field inspections, monitor revenue performance, prepare reports and participate in review meetings with higher authorities. In addition, substantial time is consumed in travelling between Block Headquarters, BTS sites, Gram Panchayats and customer locations. Administrative work such as preparation of reports, updating dashboards, responding to correspondence, monitoring KPIs and supervising subordinate staff further reduces the time available for field operations. Even under ideal circumstances, the cumulative workload significantly exceeds the practical capacity of one officer during normal working hours. During emergencies or disaster situations, the workload increases further.
- 15. Difficulties in Managing Operations in Gram Panchayat Clusters:** The GP Cluster In-charge is expected to function as the field-level coordinator responsible for ensuring uninterrupted telecom services, maintenance of BharatNet infrastructure, FTTH provisioning, customer complaint resolution, preventive maintenance, coordination with contractors and monitoring of network assets across multiple Gram Panchayats. In reality, a GP Cluster may contain numerous BTSs, optical fibre routes, FTTH customers, Wi-Fi hotspots, BharatNet equipment and Government connectivity projects spread over large geographical areas. The officer must respond simultaneously to cable cuts, power failures, equipment breakdowns, customer complaints and service requests. Without dedicated field teams, adequate vehicles and logistical support, effective supervision of such geographically dispersed infrastructure becomes extremely difficult.
- 16. Increased Dependence on Travel rather than Supervision:** A major proportion of the working day of employee/executive is likely to be spent travelling rather than performing productive supervisory functions. Frequent travel will surely result in reduced time available for preventive maintenance, Limited interaction with enterprise customers, and Delayed inspection of network infrastructure, reduced monitoring, and lower availability for customer grievance redressal, increased fatigue and reduced operational efficiency. Instead of improving accountability, excessive travel may reduce the officer's ability to effectively supervise field operations.
- 17. Impact on Emergency Response:** Telecom services operate continuously throughout the year, and network failures often occur without warning. Major fibre cuts, transmission failures, natural disasters, power outages and equipment failures require immediate mobilisation of technical resources. If the Block In-charge is attending official meetings or engaged in business development activities, prompt coordination of restoration work may become difficult. Similarly, if the officer is involved in emergency fault restoration, planned commercial activities and customer meetings may have to be postponed.

The proposal does not clearly indicate how such competing priorities will be managed during emergencies.

18. Lack of Supporting Resources: The restructuring proposal focuses extensively on redistribution of responsibilities but provides limited information regarding corresponding enhancement of operational resources. For successful implementation of this proposal and execution of works would require dedicated vehicles, adequate field staff. Technical assistants, Modern testing instruments. Digital monitoring tools, Reliable communication systems in Gram Panchayat level, sufficient maintenance funds and minimum required support from Administration and controlling officers to meet these high expectations. Without strengthening these supporting resources, merely increasing accountability may not produce the intended improvements in organisational performance.

19. Risk of Employee Burnout: Assigning extensive technical, commercial, administrative and coordination responsibilities to a single officer over a large geographical area is likely to result in excessive workload and prolonged working hours. Continuous pressure to achieve commercial targets while simultaneously maintaining network performance, responding to emergencies and travelling extensively may adversely affect employee morale, job satisfaction and long-term productivity. Sustained work overload also increases the likelihood of stress-related health issues and may contribute to higher attrition and increased requests for transfer.

20. Need for Scientific Workload Assessment: The restructuring proposal does not appear to be supported by a detailed workload study or operational analysis demonstrating that the assigned responsibilities can be effectively managed by one Block In-charge and one GP Cluster In-charge. Before adopting such a model across the country, BSNL should undertake a comprehensive scientific assessment and if it is done the same may be shared with us so that we will convince executives in BSNL to stop opposing this restructuring plan. Only after such empirical evaluation can it be concluded whether the proposed manpower deployment is adequate for achieving the intended objectives.

From all above facts and submissions it is crystal clear that the proposed Block and GP based Cluster model represents a significant departure from the existing organisational structure and seeks to establish a single point accountability mechanism without even minimum required support. Management has kept focus only on transferring the existing executives and all other options are not even touched and hence we have doubt on these activities. Accountability alone cannot ensure organisational success unless it is supported by realistic workload allocation, adequate manpower, and sufficient logistical resources and scientifically validated operational planning.

Considering the unique geographical conditions of Uttarakhand, the extensive travel involved, the diversity of technical and commercial responsibilities assigned to each officer, and the absence of a documented workload assessment, there is a substantial risk that the proposed model may overburden field officers and reduce overall organisational effectiveness. Before considering nationwide implementation, BSNL should conduct a comprehensive pilot evaluation based on measurable indicators such as fault restoration time, customer satisfaction, revenue growth, employee workload, operational efficiency and financial impact. Such an evidence-based approach would ensure that future organisational reforms strengthen BSNL's revival while maintaining service quality and employee effectiveness.
